REMARKS

Applicant has carefully reviewed and considered the Office Action mailed on February 22, 2008, and the references cited therewith.

Claims 1, 7, and 8 are amended, claims 2, 4-6, and 15-28 are canceled, and no claims are added; as a result, claims 1, 3, and 7-14 are now pending in this application.

Affirmation of Elections

As provisionally elected by Applicants' representative, Dana B. LeMoine, on February 8, 2008, Applicants elect to prosecute the invention of Group 1, claims 1-14.

The claims of the non-elected invention, claims 15-28, are hereby canceled. However, Applicant reserves the right to later file continuations or divisionals having claims directed to the non-elected inventions.

Claim Objections

Claims 7, 8, 9, and 14 were objected to as reciting third and fourth filters which are not shown in the drawings. Applicants respectfully traverse this objection. Third and fourth filters are shown in Figures, 2, 3, 4, and 5. Low pass filters 110, 120, 130, and 140 represent the four filters. The labels LPF1 and LPF2 correspond to corner frequencies of the filters. See the last paragraph on page 3 of the application as filed. Applicants respectfully request that this objection be withdrawn.

§102 Rejection of the Claims

Claims 1, 2, 4-6, and 8 were rejected under 35 USC § 102(b) as being anticipated by Dewitt (U.S. 3,727,147). Claims 2 and 4-6 have been canceled.

The Dewitt Reference

Dewitt discloses a bandpass filter that includes an input amplifier 22, three low pass filters 24, 26, and 28, and an output amplifier 30. See col. 2, ll. 8-10, and Figure 1 of Dewitt. The input amplifier 20 has a single-ended output, and the inputs of the low pass filters are coupled in common to the single-ended output (46, Figure 1). Output amplifier 30 is an

operational amplifier that operates on a differential basis. See col. 2, ll. 62-68. Two of the filters are coupled to one input of amplifier 30, and one of the filters is coupled to a second input of amplifier 30. See Figure 1. Applicants respectfully submit that Dewitt does not disclose the output amplifier 30 having two parallel-coupled differential input stages.

Independent Claim 1

Claim 1 has been amended to include the limitations of claims 5 and 6. Applicants respectfully submit that Dewitt does not disclose, teach or suggest the subject matter of claim 1 as amended. Individual limitations recited in claim 1 are now discussed.

input stage having first and second differential outputs

Claim 1 recites an input stage having first and second differential outputs. This corresponds to input stage 210 (Figure 2), a more detailed embodiment of which is shown at 310 (Figure 3). First and second differential outputs are shown at 206 and 208. The input stage (input amplifier 22) of Dewitt has a single-ended output 46. Applicants respectfully submit that Dewitt does not disclose, teach, or suggest an "input stage having first and second differential outputs" as recited in claim 1.

first and second low pass filters coupled to the first differential output, and third and fourth low pass filters coupled to the second differential output

Dewitt does not disclose an input stage with differential outputs. See previous paragraph. Accordingly, Dewitt does not disclose, teach, or suggest an "first and second low pass filters coupled to the first differential output, and third and fourth low pass filters coupled to the second differential output" as recited in claim 1.

common mode rejection amplifier includes two parallel-coupled differential input stages

This claim limitation corresponds to the two parallel-coupled differential input stages (322, 324) and (326, 328) shown in Figure 3 of the application as filed. Dewitt discloses output amplifier 30 which operates as a common mode rejection amplifier; however, Dewitt does not disclose "two parallel-coupled differential input stages" as recited in claim 1.

Independent Claim 8

Claim 8 has been amended to clearly recite that the low pass filters receive signals from the input nodes. The subject matter of claim 8 corresponds to band pass filter 200 (Figure 2) without the input stage 210. The first and second differential input nodes correspond to node 206 and 208. The four low pass filters are shown at 110, 120, 130, and 140. The differential amplifier with two parallel input stages is shown at 220, with a more detailed embodiment shown at 320 in Figure 3. Applicants respectfully submit that Dewitt does not disclose, teach or suggest the subject matter of claim 8 as amended. Individual limitations recited in claim 1 are now discussed.

first and second differential input nodes

Claim 8 recites first and second differential input nodes. This corresponds to nodes 206 and 208 in Figure 2 of the application as filed. Dewitt does not disclose first and second differential input nodes. In contrast, Dewitt shows a single node 46 coupled to provide one signal in common to all of the low pass filters. The office action asserts that nodes 104 and 106 in Figure 3 of Dewitt anticipate the first and second differential input nodes of claim 8. Applicants respectfully disagree. Nodes 104 and 106 are not input nodes. They are driven by the low pass filters. Applicants have amended claim 8 to clearly recite the low pass filters receive signals from the first and second differential input nodes. Applicants respectfully submit that Dewitt does not disclose, teach, or suggest an "first and second differential input nodes" as recited in claim 8.

differential amplifier with two parallel input stages

This claim limitation corresponds to the two parallel input stages (322, 324) and (326, 328) shown in Figure 3 of the application as filed. Dewitt discloses output amplifier 30 which operates as a common mode rejection amplifier; however, Dewitt does not disclose "two parallel input stages" as recited in claim 8.

§103 Rejection of the Claims

Claims 3, 7, 9, and 14 were rejected under 35 USC § 103(a) as being unpatentable over Dewitt (U.S. 3,727,147) in view of Isberg (U.S. 6,029,052). Claims 10-13 were rejected under 35 USC § 103(a) as being unpatentable over Dewitt (U.S. 3,727,147) in view of Isberg (U.S. 6,029,052) and further in view of Fanous (Pub. No.: US 2003/02060663A1).

These rejections rely on the rejections of independent claims 1 and 8 under 35 USC § 102(b) as being anticipated by Dewitt (U.S. 3,727,147). Applicants respectfully submit that the rejections of claims 1 and 8 have been overcome. Accordingly, applicants believe that the claim rejections under 35 USC § 103(a) has also been overcome.

Conclusion

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney (952-473-8800) to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No.

Respectfully submitted,

LUIZ M. FRANCA-NETO ET AL.

By their Representatives,

Customer Number: 45445
952-473-8800

Date April 30, 2008 By /Dana B. LeMoine/
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